

# SEQUENCE LISTING

<110> Ruvkun, Gary  
Kennedy, Scott

<120> Compositions and Methods that Enhance RNA Interference

<130> 00786/453002

<140> US 10/587,735

<141> 2006-07-27

<150> PCT/US2005/002804

<151> 2005-02-02

<150> US 60/541,223

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Lys Gln Asn Asp Glu Pro Glu Lys Thr Ala Val Glu Val Glu Ser Ala				
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<213> Zea mays

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Tyr Phe Val Val Ile Asp Phe Glu Ala Thr Cys Asp Lys Val Asn Asn  
1 5 10 15

Pro Phe Pro Gln Glu Ile Ile Glu Phe Pro Ser Val Leu Val Asn Ser  
20 25 30

Ala Thr Gly Lys Leu Glu Glu Cys Phe Gln Thr Tyr Val Arg Pro Thr  
35 40 45

Tyr His Gln Phe Leu Thr Asp Phe Cys Lys Glu Leu Thr Gly Ile Gln  
50 55 60

Gln Ile Gln Val Asp Arg Gly Val Pro Leu Gly Glu Ala Leu Leu Met  
65 70 75 80

His Asp Lys Trp Leu Glu Asp Lys Gly Ile Lys Asn Thr Asn Phe Ala  
85 90 95

Ile Val Thr Trp Ser Asn Trp Asp Cys Arg Ile Met Leu Glu Ser Glu  
100 105 110

Cys Arg Phe Lys Arg Ile Arg Lys Pro Pro Tyr Phe Asn Arg Trp Ile  
115 120 125

Asn Leu Arg Val Pro Phe Gln Glu Val Tyr Gly Asp Val Arg Cys Asn  
130 135 140

Leu Lys Glu Ala Val Gln Leu Ala Gly Leu Thr Trp Glu Gly Arg Ala  
145 150 155 160

His Cys Gly Leu Asp Asp Ala Arg Asn Thr Ala Arg Leu Leu Ala Leu  
165 170 175

Leu Met His Arg Gly Phe Lys  
180

<210> 10

<211> 187

<212> PRT

<213> Oryza sativa

<400> 10

His Phe Val Val Val Asp Phe Glu Ala Thr Cys Glu Arg Gly Arg Arg  
1 5 10 15

Ile Tyr Pro Gln Glu Ile Ile Glu Phe Pro Ala Val Leu Val Asp Ala  
20 25 30

Ala Thr Gly Arg Leu Val Ser Ala Phe Arg Ala Tyr Val Arg Pro Arg  
35 40 45

His His Pro Arg Leu Thr Asp Phe Cys Arg Glu Leu Thr Gly Ile Ala  
50 55 60

Gln Gly Asp Val Asp Ala Gly Val Gly Leu Ala Glu Ala Leu Leu Arg  
65 70 75 80

His Asp Glu Trp Leu Arg Ala Ala Gly Val Val Glu Gly Gly Gly Arg  
85 90 95

Phe Ala Val Val Thr Trp Gly Asp Ala Asp Cys Arg Thr Met Leu Glu  
100 105 110

Gln Glu Cys Arg Phe Lys Gly Ile Ala Lys Pro Ala Tyr Phe Asp Arg  
115 120 125

Trp Val Asp Leu Arg Val His Phe Glu Ala Ala Phe Gly Gly Gly Gly  
130 135 140

Gln Arg Val Lys Leu Gln Glu Ala Val Arg Ala Ala Gly Leu Glu Trp  
145 150 155 160

Val Gly Arg Leu His Cys Gly Leu Asp Asp Ala Cys Asn Thr Ala Arg  
165 170 175

Leu Leu Val Glu Leu Leu Arg Arg Gly Val Pro  
180 185

<210> 11

<211> 184

<212> PRT

<213> Arabidopsis thaliana

<400> 11

Phe Leu Val Ile Asp Leu Glu Gly Lys Val Glu Ile Leu Glu Phe Pro  
1 5 10 15

Ile Leu Ile Val Asp Ala Lys Thr Met Glu Val Val Asp Leu Phe His  
20 25 30

Arg Phe Val Arg Pro Thr Lys Met Ser Glu Gln Ala Ile Asn Lys Tyr  
35 40 45

Ile Glu Gly Lys Tyr Gly Glu Leu Gly Val Asp Arg Val Trp His Asp  
50 55 60

Thr Ala Ile Pro Phe Lys Gln Val Val Glu Glu Phe Glu Val Trp Leu  
65 70 75 80

Ala Glu His Asp Leu Trp Asp Lys Asp Thr Asp Trp Gly Leu Asn Asp  
85 90 95

Ala Ala Phe Val Thr Cys Gly Asn Trp Asp Ile Lys Thr Lys Ile Pro  
100 105 110

Glu Gln Cys Val Val Ser Asn Ile Asn Leu Pro Pro Tyr Phe Met Glu  
115 120 125

Trp Ile Asn Leu Lys Asp Val Tyr Leu Asn Phe Tyr Gly Arg Glu Ala  
130 135 140

Arg Gly Met Val Ser Met Met Arg Gln Cys Gly Ile Lys Leu Met Gly  
145 150 155 160

Ser His His Leu Gly Ile Asp Asp Thr Lys Asn Ile Thr Arg Val Val  
165 170 175

Gln Arg Met Leu Ser Glu Gly Ala  
180

<210> 12  
<211> 13  
<212> PRT  
<213> C. elegans

<400> 12

Tyr Leu Ile Ala Ile Asp Phe Glu Cys Thr Cys Val Glu  
1 5 10



<210> 13  
<211> 13  
<212> PRT  
<213> C. elegans

<400> 13

Phe Val Thr Asp Gly Pro His Asp Met Trp Lys Phe Met  
1 5 10

<210> 14  
<211> 12  
<212> PRT  
<213> C. elegans

<400> 14

Gly Asn Lys His Ser Gly Leu Asp Asp Ala Thr Asn  
1 5 10

<210> 15  
<211> 13  
<212> PRT  
<213> C. briggsae

<400> 15

Asn Phe Gln Ala Ile Asp Phe Glu Cys Thr Cys Val Glu  
1 5 10

<210> 16  
<211> 13  
<212> PRT  
<213> C. briggsae

<400> 16

Phe Val Thr Asp Gly Pro His Asp Met Trp Lys Phe Met  
1 5 10

<210> 17  
<211> 12  
<212> PRT  
<213> C. briggsae

<400> 17

Gly Asn Lys His Ser Gly Leu Asp Asp Ala Arg Asn  
1 5 10

<210> 18  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 18

Tyr Ile Cys Ile Ile Asp Phe Glu Ala Thr Cys Glu Glu  
1 5 10

<210> 19  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 19

Leu Leu Thr Asp Gly Ser Trp Asp Met Ser Lys Phe Leu  
1 5 10

<210> 20  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 20

Gly Arg Pro His Cys Gly Leu Asp Asp Ser Lys Asn  
1 5 10

<210> 21  
<211> 13  
<212> PRT  
<213> Mus musculus

<400> 21

Tyr Ile Cys Ile Ile Asp Phe Glu Ala Thr Cys Glu Glu  
1 5 10

<210> 22  
<211> 13  
<212> PRT  
<213> Mus musculus

<400> 22

Ile Leu Thr Asp Gly Ser Trp Asp Met Ser Lys Phe Leu  
1 5 10

<210> 23  
<211> 12

<212> PRT  
<213> Mus musculus

<400> 23

Gly Arg Pro His Ser Gly Leu Asp Asp Ser Lys Asn  
1 5 10

<210> 24  
<211> 13  
<212> PRT  
<213> X. laevis

<400> 24

Tyr Ile Cys Val Ile Asp Phe Glu Ala Thr Cys Glu Ala  
1 5 10

<210> 25  
<211> 13  
<212> PRT  
<213> X. laevis

<400> 25

Ile Leu Thr Asp Gly Ser Trp Asp Met Ser Lys Phe Leu  
1 5 10

<210> 26  
<211> 12  
<212> PRT  
<213> X. laevis

<400> 26

Gly Arg Leu His Ser Gly Leu Asp Asp Ser Lys Asn  
1 5 10

<210> 27  
<211> 13  
<212> PRT  
<213> Danio rerio

<400> 27

Tyr Ile Cys Val Val Asp Phe Glu Ala Thr Cys Glu Glu  
1 5 10

<210> 28  
<211> 13  
<212> PRT  
<213> Danio rerio

<400> 28

Phe	Leu	Thr	Asp	Gly	Ser	Trp	Asp	Met	Gly	Lys	Phe	Leu
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<210> 29

<211> 12

<212> PRT

<213> Danio rerio

<400> 29

Gly	Arg	Pro	His	Cys	Gly	Leu	Asp	Asp	Ser	Arg	Asn
1				5					10		

<210> 30

<211> 13

<212> PRT

<213> S. pombe

<400> 30

Tyr	Leu	Leu	Ile	Val	Asp	Val	Glu	Ala	Thr	Cys	Glu	Glu
1				5					10			

<210> 31

<211> 13

<212> PRT

<213> S. pombe

<400> 31

Trp	Ala	Cys	Asp	Gly	Pro	Trp	Asp	Met	Ala	Ser	Phe	Leu
1				5					10			

<210> 32

<211> 12

<212> PRT

<213> S. pombe

<400> 32

Gly	Ser	Glu	His	Arg	Gly	Ile	Asp	Asp	Ala	Arg	Asn
1				5					10		

<210> 33

<211> 13

<212> PRT

<213> Homo sapiens

<400> 33

Lys Cys Val Ala Ile Asp Cys Glu Met Val Gly Thr Gly  
1 5 10

<210> 34  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 34

Val Val Gly His Ala Leu His Asn Asp Phe Gln Ala Leu  
1 5 10

<210> 35  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 35

Gln His Gly His Ser Ser Val Glu Asp Ala Thr  
1 5 10